WHAT IS CLAIMED IS:

1. An optical fiber cable comprising:

two or more optical fibers and a partitioning spacer housed in a space encircled by a sheath;

the partitioning spacer including an axial portion and a plurality of partitioning plate portions;

the partitioning spacer having a sectional shape that the partitioning plate portions radially extend toward an inner circumferential surface of the sheath from the axial portion; and

each of the partitioning plate portions having a leading end provided with an enlarged portion in contact with the inner circumferential surface of the sheath and a connecting portion connecting the enlarged portion to the axial portion;

wherein the space encircled by the sheath is divided into a plurality of partitioned slots by the partitioning plate portions, and the respective optical fibers are distributed so that two or more optical fibers are not provided in a single partitioned slot.

2. The optical fiber cable according to Claim 1, wherein at least one tension member is provided in a partitioned slot without an optical fiber provided therein.

3. The optical fiber cable according to Claim 1, wherein at least one selected from the group consisting of a power line and an information transmission line is

provided in a partitioned slot without an optical fiber provided therein.

4. The optical fiber cable according to Claim 1, wherein the sheath has a hardness of not higher than 95 Shore A hardness.

5. The optical fiber cable according to Claim 4, wherein the sheath consists of thermoplastic resin, and the thermoplastic resin is one selected from soft vinyl chloride, chlorinated polyethylene and soft polyethylene.

6. The optical fiber cable according to Claim 1, wherein the sectional shape of the partitioning spacer has the following relations (1) and (2) when each of the enlarged portion has a maximum dimension L in a direction perpendicular to a radial direction, each of the connecting portion has a length K in the radial direction, each of the connecting portion has a dimension W in the direction perpendicular to the radial direction, and each of the optical fibers has an outer diameter R:

$$L - W \geqq R \qquad (1)$$

$$K \geqq R \qquad (2)$$

7. The optical fiber cable according to Claim 6, wherein at least one tension member is provided in a partitioned slot without an optical fiber provided therein.

8. The optical fiber cable according to Claim 6, wherein at least one selected from the group consisting of a power line and an information transmission line is

provided in a partitioned slot without an optical fiber provided therein.

9. The optical fiber cable according to Claim 6, wherein the sheath has a hardness of not higher than 95 Shore A hardness.

10. The optical fiber cable according to Claim 9, wherein the sheath consists of thermoplastic resin, and the thermoplastic resin is one selected from soft vinyl chloride, chlorinated polyethylene and soft polyethylene.

11. The optical fiber cable according to Claim 1, wherein the optical fibers comprise graded refractive index plastic optical fibers.

12. The optical fiber cable according to claim 11, wherein at least one tension member is provided in a partitioned slot without an optical fiber provided therein.

13. The optical fiber cable according to Claims 11, wherein at least one selected from the group consisting of a power line and an information transmission line is provided in a partitioned slot without an optical fiber provided therein.

14. The optical fiber cable according to Claim 11, wherein the sheath has a hardness of not higher than 95 Shore A hardness.

15. The optical fiber cable according to Claim 14, wherein the sheath is made of thermoplastic resin, and the thermoplastic resin is one selected from soft vinyl

chloride, chlorinated polyethylene and soft polyethylene.

15. A method for preparing an optical fiber cable defined in Claim 1, comprising distributing the optical fibers in the partitioning spacer, and then forming the sheath by thermoplastic resin extruded from a resin extruder.

16. The method for preparing an optical fiber cable according to Claim 16, further comprising heat-treating the partitioning spacer under a thermal environment at 70 - 90°C before preparation of the optical fiber cable.